

DEPARTMENT OF FOOD AND AGRICULTURE  
PROPOSED CHANGES IN THE REGULATIONS  
Title 3, California Code of Regulations  
Section 3442, *Bactrocera latifrons* Interior Quarantine  
INITIAL STATEMENT OF REASONS/  
POLICY STATEMENT OVERVIEW

Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address

These regulations are intended to address the obligation of the Secretary of Food and Agriculture (Department) to protect the agricultural industry of California from the movement and spread within California of injurious plant pests.

Specific Purpose and Factual Basis

The specific purpose of Section 3442 is to enable the Department to regulate the movement of hosts and other possible carriers of Malaysian fruit fly from an area under quarantine to prevent the artificial spread of the fly to noninfested areas to protect California's agricultural industry.

The factual basis for the determination by the Department that the adoption of Section 3442 is necessary is as follows:

Malaysian fruit fly (*Bactrocera latifrons*) is an insect pest which attacks the fruit of various plants including pepper, tomato, and guava. The female punctures host fruit to lay eggs which develop into larvae. The punctures admit decay organisms that may cause tissue breakdown. Larval feeding causes breakdown of fruit tissue. Fruits with egg punctures and larval feeding are generally unfit for human consumption. Pupae may be found in fruit, but normally are found in soil.

If the fly were allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to increased pesticide use,

decreased production of marketable fruit, and loss of markets if the United States Department of Agriculture (USDA) or other states or countries enact a quarantine against California products which can host and carry the fly. Currently, the Department has an active eradication project in Los Angeles County.

In the past, the Department has traditionally established the quarantine boundaries for fruit flies through an emergency rulemaking action, then provided public notification as required under the California Administrative Procedure Act and GC and then filed a Certificate of Compliance to retain the regulation. To remove the quarantine area the Department has used the same process or let the quarantine area be removed through the operation of law by not filing a Certificate of Compliance or used the normal rulemaking process to remove the quarantine area.

Under GC Section 11342.545 and Public Resources Code Section 21080(b)(4), “Emergency” means a situation that calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare.” Under GC Section 11346.1(b)(1), “If a state agency makes a finding that the adoption of a regulation is necessary to address an emergency, the regulation may be adopted as an emergency regulation.”

Most of the fruit fly quarantines are associated with urban environments. Under this setting it is an emergency to establish the quarantine regulation to ensure the USDA doesn’t regulate the entire state for Malaysian fruit fly and to immediately prevent the artificial spread of the fly within or from the urban quarantine area.

The Department concluded that a more effective and efficient responsive approach is necessary which ensures adequate protections are in place when needed and can be removed in a consistent timely matter when unnecessary. The purpose of this proposed adoption is to accomplish these things in a transparent manner which can be more easily understood by those who may be affected by this regulation *in the future*. This adoption specifies the pest, the process for adding and removing quarantine areas, establishing the

initial size of the area, establishing how the area may be expanded if there are additional detections of Malaysian fruit fly within the quarantine area. It establishes an appeal process, a list serve option, specifies the life cycle for Malaysian fruit fly, the articles and the commodities covered and the quarantine restrictions.

Subsection 3442(a) establishes that the pest is Malaysian fruit fly, *Bactrocera latifrons*. In a quarantine regulation there is a demonstrated need to know the targeted pest.

Subsection 3442(b)(1) establishes that an area shall be designated as a quarantine area when an infestation is present, the local California county agricultural commissioner (CAC) has been notified and requests the quarantine, the area description is posted to the Department's website and that any interested party may receive notification; including through a list serve option. To establish a quarantine there is a need to communicate with the local affected CAC(s) and other interested parties and provide a boundary description. This subsection meets those needs.

Subsection 3442(b)(2) establishes when an infestation is present (including for satellite infestations), including whether the area is undergoing sterile insect release to eradicate an infestation. There is a need for the CAC(s) and other interested parties to understand what constitutes an incipient infestation and what may trigger an expansion. Subsection 3442(b)(2)(a) establishes when an infestation is present in an urban environment. Subsection 3442(b)(2)(b) establishes when an infestation is present in an agricultural environment. Subsection 3442(b)(2)(c) establishes when a satellite infestation is present and may expand the quarantine area. These subsections reflect the current national standard established by the USDA which is internationally accepted by our trading partners.

Subsection 3442(b)(3) establishes a minimum radius of 4.5 miles surrounding qualifying detection sites as the epicenter used under subsections 3442 (b)(2)(a) and 3442 (b)(2)(B) for qualifying detections, the number of pest detections needed to trigger a quarantine area

designation, that known mapping features be used when possible and that imaginary lines may be used with or without latitude and longitude points. There is a need for the CAC(s) and other interested parties to understand how the size and boundary line of a quarantine area is determined. This subsection reflects the current national standard established by the USDA and it is also an internationally accepted standard.

Subsection 3442 (b)(4) establishes that any interested party may appeal the quarantine area designation and the process to do so. There is a need to have continued opportunity for both local and public input. This subsection provides that opportunity. “‘Emergency’ means a situation that calls for immediate action to avoid serious harm to the public peace, health, safety, or general welfare,” per Government Code (GC) Section 11342.545. If a state agency makes a finding that the adoption of a regulation is necessary to address an emergency, the regulation may be adopted as an emergency regulation, per GC Section 11346.1(b)(1). It is necessary to continue to recognize the emergency nature in this proposed quarantine regulation. Therefore, it is necessary that any appeal of an area designation be held to a high standard and this is achieved through requiring the appeal to contain clear and convincing evidence. Such evidence would be similar to that necessary to overturn or prevent a proposed emergency regulation being approved by the Office of Administrative Law. The Office of Administrative Law has up to 10 days to render its decision regarding a proposed emergency action. This subsection provides the same timeframe.

Subsection 3442(b)(5) establishes when the quarantine area designation shall be removed. There is a need for the CAC(s) and other interested parties to understand when a quarantine should end. This subsection establishes under what conditions quarantines should end. Three life cycles without detections of a fruit fly life stage is the current national standard established by the USDA; it is also an internationally accepted standard.

Subsection 3442(b)(6) establishes the life cycle of Malaysian fruit fly. It is necessary to understand the biology of the fly in order to determine when life cycles have been

completed. This subsection establishes the scientifically known life cycle of Malaysian fruit fly that is currently recognized by the USDA and is also internationally accepted.

Subsection 3442(c) establishes the articles and commodities covered by the regulation. Subsection 3442(c)(1) establishes the fruit, vegetables and berries which are, as host plants, regulated by scientific and common name. The use of both scientific and common name helps ensure clarity for those who may be regulated. Subsection 3442(c)(2) establishes that soil within the dripline of plants producing or which have produced host fruit, vegetables or berries is regulated. Malaysian fruit fly attacks the host fruit, vegetables or berries by laying eggs, these mature into larvae and the larvae tunnel out of the host and drop into the soil to pupate and then emerge as adults from the soil. Moving soil contaminated with larvae or pupae to an uninfested area could lead to a new infestation. Subsection 3442(c)(3) establishes that other products, articles or means of conveyance may be regulated when it is determined by the Secretary or County Agricultural Commissioner that they may pose a danger of spreading live life stages of Malaysian fruit fly; they may be regulated when the relevant parties have been so notified. Malaysian fruit fly is an exotic pest and has not been tested against all possible hosts. California could support a new host that Malaysian fruit fly attacks that is not a currently recognized host. A trailer could have contained host fruit and the Malaysian fruit fly larvae could have dropped out and pupated on the trailer floor. In both these cases there would be a threat of moving live life stages of Malaysian fruit fly. There are so many possible permutations of different scenarios that it is necessary to have a potential broad restriction. All of the above subsections are necessary to be able to prevent the movement of live Malaysian fruit fly life stages from a quarantined area. Human assisted movement is the primary way new infestations are begun over long distances.

Subsection 3442(d) establishes the quarantine restrictions for the articles and commodities covered in regulation. Subsection 3442(d)(1) establishes that, at the wholesale level, articles and commodities covered in subsection (c) are prohibited movement within or from the area under quarantine and the exceptions. This is necessary to prevent the further

spread of the Malaysian fruit fly. Subsection 3442(d)(1)(A) establishes that the article or commodity covered can move if treated in a manner approved by the Department to eliminate Malaysian fruit fly, it is transported in a manner to preclude exposure to Malaysian fruit fly, and it is accompanied by a written certificate issued by an authorized State or county agricultural official affirming compliance with this subsection. Subsection 3442(d)(1)(B) establishes if the article or commodity can move if it is moving for treatment for Malaysian fruit fly or processing and in a manner approved by the Department to preclude exposure to Malaysian fruit fly and, it is accompanied by a written certificate issued by an authorized State or county agricultural official affirming such movement has been authorized under this subsection. At the wholesale level, businesses dealing with a large volume of host material need to know how to obtain host commodities from others within the regulated area. Additionally, some wholesalers may have growers under contract within the regulated area and need to know how to move the product for treatment or processing. These two subsections are necessary and provide the clarity for how this is accomplished.

Subsection 3442(d)(2) establishes that at the wholesale level, articles and commodities covered in subsection (c) which have been commercially produced outside the area under quarantine are prohibited movement into the area under quarantine except when accompanied by a shipping document indicating the point of origin and destination and moved in compliance with certain restrictions. It is necessary to establish separate restrictions for the wholesale movement of host commodities produced outside the quarantine area. It is a standard industry practice to use shipping documents for deliveries and this subsection authorizes utilization of that practice. Host material produced outside the quarantine area does not pose a potential pest risk until it moves within the quarantine area. Therefore it is necessary to mitigate the potential pest risk to prevent the artificial movement of Malaysian fruit fly life stages. Subsection 3442(d)(2)(A) establishes compliance with the regulation when the article or commodity is moving directly through the quarantine area without delay by a direct route and it is safeguarded. Subsection 3442(d)(2)(B) establishes compliance with the regulation when the article or commodity is

destined to a wholesale or retail establishment within the quarantined area and, if moving between 9 a.m. and sunset, is transported in an enclosed vehicle or container or completely enclosed by a covering to prevent exposure to the Malaysian fruit fly. The danger from adult female Malaysian fruit fly laying eggs only exists after the morning warms and ends at sunset when the flies are at rest. Subsection 3442(d)(2)(C) establishes compliance with the regulation when the article or commodity is destined to a commercial processing facility. Commercial processing eliminates any Malaysian fruit fly pest risk and no additional safeguarding is needed.

Subsection 3442(d)(3) establishes that at the retail level for commercial articles and commodities covered, all that is needed by the person in possession is a sales receipt or comparable document to be in compliance with the regulation. This is a standard industry practice and ensures the host material originated from a certified source without being overly burdensome.

Subsection 3442(d)(4) establishes that articles and commodities covered which have been noncommercially produced within the area under quarantine, including “backyard” production, are prohibited movement from the premises where grown except under written authorization of the Department or county agricultural commissioner. Sharing home-produced berries, fruits and vegetables can be both a family and cultural tradition. In general, within the quarantine area, noncommercial host commodities pose the highest risk of being infested with Malaysian fruit fly. There are regulatory options for this plant material to be certified if the person in possession chooses to pursue them. This subsection meets the need to prohibit the movement of the highest risk articles and commodities covered unless officially authorized.

Subsection 3442(d)(5) establishes that articles and commodities covered which have been noncommercially produced outside the area under quarantine are prohibited movement into the area under quarantine except when the person in possession has signed a statement showing the commodity, amount, origin, destination, and date of transportation.

From past experience on quarantine projects, investigations determined there were instances of people moving backyard fruit produced within the quarantine area for distribution to neighbors inside and outside the quarantine area but when initially questioned stated it moved into the area from a source outside the area. This subsection provides for the sharing of berries, fruits and vegetables which do not pose a pest risk.

Subsection 3442(d)(6) establishes that within the area under quarantine, no wholesale or retail establishment shall handle, sell, or offer for sale any article or commodity covered unless such commodities at all times are maintained in a manner approved by the Department to preclude exposure to Malaysian fruit fly. No commodity covered shall be held for sale or sold from a truck, trailer, or other mobile vehicle. There are many open air businesses which may display host berries, fruits and vegetables for sale. Adult female Malaysian fruit flies are mobile by nature and can “sting” and lay eggs in exposed host commodities. Therefore, to prevent host commodities from becoming infested while on display, the commodities need to be safeguarded. There are numerous ways safeguarding can be successfully accomplished including the use of “air curtains” in entry ways, keeping the host commodities cold so the female Malaysian fruit fly will not attempt to sting it, covering with plastic tarps or fine mesh screens, or placing transparent solid lids over the display containers, etc. This is a performance standard and the Department is open to any new method that can accomplish it. In past quarantine projects, the Department has experienced significant issues with mobile vendors of host berries, fruits and vegetables. These vendors tend to move frequently into and out of the quarantine area and within the quarantine area with the host commodities fully exposed. Encountering a mobile vendor with exposed host commodities leads to the host commodities being confiscated; this creates tension between the vendors and the regulatory staff. In order to prevent the unnecessary confiscation of host commodities and increase public safety for the regulatory officials, it is necessary to ban the sale of host commodities from mobile vendors within the quarantine area. Quarantine regulatory officials map the quarantine area in the different languages used and encountered locally and distribute them directly to the mobile vendors as community outreach.



All of the above subsections are necessary to ensure:

- the targeted pest is known
- the processes for establishing and removing potential quarantine boundaries are easily understood, transparent, can be accomplished within a biologically timely manner and provide an opportunity to appeal the action with cause
- the articles and commodities covered are known
- the quarantine restrictions are known

### California Environmental Quality Act

A Statewide Plant Pest Prevention and Management Environmental Program Environmental Impact Report (EIR) was prepared by the Department as the lead agency under the California Environmental Quality Act. The EIR addresses the potential impacts and mitigations when implementing the Statewide Plant Pest Prevention and Management Program activities related to Malaysian Fruit Fly.

The EIR may be accessed at the following website:

<http://www.cdfa.ca.gov/plant/peir/>.

### **Economic Impact Analysis**

#### Impacts to Nursery Stock

All plant sellers within the quarantine area will be moderately impacted. Host nursery stock must be stripped of fruit and discarded in a manner consistent with Project requirements. Containerized host nursery stock bearing fruit may not be moved as it carries potential of artificially spreading the Malaysian fruit fly.

#### Impacts to Fruit Sellers

Farmers' markets within the quarantine area that host fruits will be moderately impacted. All host fruit during daylight hours must be covered by an approved netting that is raised off of the fruit, or in a closed container. If the seller has a tent, the tent may be covered from top to bottom with an approved netting.

Retail Markets within the quarantine area selling host fruit must either have a working air curtain, closed doors, hard plastic curtains in the doorways, or protect their host fruit in a manner consistent with the Project, which would include netting, containers, or cold storing the fruit.

Ninety three Certified Farmers' Market Fruit Sellers, four Food Banks, 175 Fruit Sellers, two Retail Nurseries, two Commercial Nurseries, three Fruit Haulers, 13 Fruit Freight Forwarders, three Growers, and three Harvesters are in the affected area.

#### Potential Agricultural Industry Impacts

If the fly were allowed to spread and become established in host fruit production areas, California's agricultural industry would suffer losses due to decreased production of marketable fruit, increased pesticide use, and loss of markets if other states or countries enacted quarantines against California products. Host fruit includes, but are not limited to chili pepper, tomato, and guava.

The 2014-2015 California Agricultural Resource Directory placed the approximate gross annual value of certain hosts. These values are \$355 million for tomatoes and \$309 million for peppers.

Other listed hosts may be grown as specialty crops in California. These niche markets would also be negatively impacted.

#### Potential Impact to Homeowners and Community Gardens

Many of the host fruit attacked by the Malaysian fruit fly are favorites for the home gardener and community gardens. Therefore, if Malaysian fruit fly were not quarantined and were allowed to spread, then homeowners and community gardeners would be negatively impacted. There are two community gardens in the affected area.

### Potential Impacts to General Fund and Welfare

California's unemployment rate in March 2015 dropped to 6.5 per cent. During the preceding 12 months prior to March 2015, agricultural employment was up by 5.1 per cent. The agricultural industry is one of the economic engines which are lowering the State's unemployment rate. Additionally, any job losses in this area would likely be felt by low-skilled workers whose employment options are already limited. The loss of any agricultural jobs would likely result in an increase in the State's public assistance obligations which would also negatively impact the State's economic recovery.

### Anticipated Benefits from This Regulatory Action

One of the Department's broad statutory objectives is to prevent the introduction and spread of injurious insect or animal pests, plant diseases, and noxious weeds (FAC Section 403); the Department may adopt regulations as are reasonably necessary to achieve this goal (FAC Section 407). The Department is obligated to investigate the existence of any pest that is not generally distributed within this State, determine the probability of its spread, assess the feasibility of its control or eradication (FAC Section 5321) and may establish and maintain quarantine regulations (FAC Section 5322).

The existing law obligates the Secretary to investigate and determine the feasibility of controlling or eradicating pests of limited distribution but establishes discretion with regard to the establishment and maintenance of regulations to achieve this goal. The adoption of this regulation benefits the growers of the regulated commodities (nursery stock, fruit for domestic use and exports, packing facilities) and the environment (urban landscapes) by having the process for establishing and removing quarantines to prevent the artificial spread of Malaysian fruit fly should it be introduced as an incipient population.

The Department is also obligated to protect the general welfare and economy of the State and to seek to maintain the economic well-being of agriculturally dependent rural communities in this State (FAC Section 401.5). The activities authorized by this adoption of this regulation are preventing the establishment and potential spread of the Malaysian fruit

fly to uninfested areas of the State including agriculturally dependent rural communities. Historically, Malaysian fruit fly introductions in California have been associated with introductions into the urban environment.

As a quarantine is established for Malaysian fruit fly, the California, national and international consumers of California host fruit benefit by having high quality fruit available at lower cost. It is assumed that any increases in production costs would ultimately be passed on to the consumer.

The adoption of this regulation benefits homeowners and community gardens that grow their own host fruits for consumption and host material that is planted as ornamentals in various rural and urban landscapes.

This regulation will benefit the public's general welfare by providing authority for the Department to perform quarantine activities against Malaysian fruit fly in the State.

The implementation of this regulation will prevent:

- Direct damage to the agricultural industry growing host fruits outside the quarantine area
- Indirect damage to the agricultural industry growing host fruits due to the implementation of quarantines by other countries and loss of export markets
- Increased production costs to the affected agricultural industries
- Increased pesticide use by the affected agricultural industries
- Increased costs to the consumers of host fruits
- Increased pesticide use by homeowners and others
- The need to implement an unnecessary federal regulation for the entire State

### Assessment

Based upon the Economic Impact Analysis, the Department has made an assessment that the adoption of the regulation would not 1) create or eliminate jobs within California; 2)

create new business or eliminate existing businesses with California; or 3) affect the expansion of businesses currently doing business with California. The Department has been conducting quarantine projects in California for over 30 years without creating or eliminating businesses.

This adoption is for an on-going program. The Department is not aware of any impacts to worker safety. The Department is not aware of any specific benefits to the health of California residents. The Department believes the amendment of this regulation benefits the welfare and economic well-being of California residents by protecting property values, and local, State and national parks, wildlife and the environment from artificial spread of this insect pest.

The Department is the only agency which can implement plant quarantines. As required by GC Section 11346.5(a)(3)(D), the Department has conducted an evaluation of this regulation and has determined that it is not inconsistent or incompatible with existing state regulations.

#### Estimated Cost or Savings to Public Agencies or Affected Private Individuals or Entities

The Department of Food and Agriculture has determined that Section 3442 does not impose a mandate on local agencies or school districts, except that agricultural commissioners of counties under quarantine have a duty to enforce it. No reimbursement is required under Section 17561 of the GC because an area will not be designated as a quarantine area unless requested by the affected CAC(s).

The Department also has determined that no savings or increased costs to any state agency, no reimbursable costs or savings under Part 7 (commencing with Section 17500) of Division 4 of the GC to local agencies or school districts, no nondiscretionary costs or savings to local agencies or school districts, and no costs or savings in federal funding to the State will result from the proposed action. The cost impact of the changes in the regulations on private persons or businesses is not expected to be significant. This regulation only establishes the processes for implementing and removing Malaysian fruit fly

quarantines.

The Department has determined that the proposed action will not have a significant adverse economic impact on housing costs or California businesses, including the ability of California businesses to compete with businesses in other states. The Department's determination that this action will not have a significant adverse economic impact on businesses was based on the following factors below.

Historically, within a quarantine area, the Department identifies markets/produce vendors. These businesses must maintain quarantine commodities in a manner that precludes exposure to Malaysian fruit fly. Approved safeguards include maintaining the commodities indoors, in coolers, in plastic bags, enclosed behind window screen, or covered with fine mesh or plastic. All of these methods are inexpensive. These businesses may experience a little reduction in sales and reduced shelf life of the commodities. Neither of these reductions would represent a significant economic impact.

The Department identifies farmers' market/swap meets in an area under quarantine. Businesses selling host produce at these locations must maintain the quarantine commodities in a manner that precludes exposure to Malaysian fruit fly. Approved safeguards include maintaining the commodities in coolers, in plastic bags, or covered with fine mesh or plastic. All of these methods are inexpensive. These businesses may experience a little reduction in sales and reduced shelf life of the commodities. Neither of these reductions would represent a significant economic impact.

The Department also identifies nurseries in the area under quarantine that must treat the soil of host plants and strip the fruit of host plants before they may be moved from or within the area under quarantine. The required treatment is a soil drench with diazinon. This treatment does not have to be repeated if the fruit is kept stripped from the plants. The cost of the treatment is low and existing nursery personnel perform the treatment and fruit stripping. The fruit is placed in plastic bags for landfill disposal. The plastic bags are

inexpensive and the extra material for landfill disposal does not add appreciably to their existing disposal costs.

The Department also identifies conventional and organic growers within the quarantine area. Conventional ground spray costs are approximately \$5.4 per acre. Spray applications may be made by a commercial applicator or by the growers. The total costs for organic growers may be approximately \$96 per acre. Growers routinely spray for other plant pests so the additional applications should not be a significant expense. This expense would be incurred if there were no regulation and the grower wanted to mitigate damage that Malaysian fruit fly would cause to their host crops; in the latter case those costs would be incurred annually.

The Department is not aware of any business going out of business due to a quarantine.

Based on the above information, it was determined that the adoption of Section 3442 will not have a significant adverse economic impact on businesses. All costs associated with compliance with the regulation are relatively low and, for the most part, options are available to businesses to select the means with the lowest cost and easiest implementation for them. For many businesses, no additional costs will be incurred.

#### Alternatives Considered

The Department of Food and Agriculture determined that no alternative considered would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

#### Information Relied Upon

The Department is relying upon the following studies, reports, and documents in the adoption of Section 3442:

Excel Document-“B. latifrons Federal Order hosts Updated Jan22nd2016FINAL.”

Letter dated January 14, 2016 from Kurt E. Floren, Los Angeles County Agricultural Commissioner, to Secretary Karen Ross.

Pest and Damage Record # CE0P06379991 California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

“Annotated World Bibliography of Host Fruits of *Bactocera latifrons* (Hendel) (Diptera: Tephritidae).” March 8, 2013, United States Department of Agriculture.

“*Bactrocera latifrons* (Hendel), Solanum or Malaysian Fruit Fly, Life-cycle Model Review”. January 19, 2016, United States Department of Agriculture.

Email from Stephen Brown to CDFA\_DL\_Permits. January 20, 2016. California Department of Food and Agriculture.

Email from Stephen Brown to CDFA\_DL\_Permits. January 25, 2016. California Department of Food and Agriculture.